

What is claimed is:

1. A liner for a shaped charge comprising:

a mixture of powdered heavy metal and powdered metal binder wherein said powdered heavy metal comprises from 90 percent by weight of said mixture to 97 percent by weight of said mixture, and wherein said powdered metal binder comprises from 10 percent by weight of said mixture to 3 percent by weight of said mixture, said mixture compressively formed into a liner body shape.

2. The liner for a shaped charge of claim 1 further comprising a lubricant intermixed with said tungsten and said powdered metal binder.

3. The liner for a shaped charge of claim 2, wherein said lubricant comprises powdered graphite.

4. The liner for a shaped charge of claim 2, wherein said lubricant comprises oil.

5. The liner for a shaped charge of claim 1 wherein said powdered metal binder is copper.

6. The liner for a shaped charge of claim 1 wherein said powdered heavy metal is tungsten.

7. The liner for a shaped charge of claim 1 wherein said powdered metal binder is selected from the group consisting of bismuth, zinc, tin, uranium, silver, gold, antimony, cobalt, zinc alloys, tin alloys, nickel, and palladium.

8. The liner for a shaped charge of claim 1, wherein said liner body shape is selected from the group consisting of conical, bi-conical, tulip, hemispherical, circumferential, linear, and trumpet.

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9. A shaped charge comprising:
a housing;
a quantity of explosive inserted into said housing; and
a liner inserted into said housing so that said quantity of explosive is positioned between said liner and said housing, said liner formed from a mixture of powdered tungsten and powdered metal binder, wherein said powdered heavy metal comprises from 90 percent by weight of said mixture to 97 percent by weight of said mixture, and wherein said powdered metal binder comprises from 10 percent by weight of said mixture to 3 percent by weight of said mixture, said mixture compressively formed into a liner body shape.

10. The liner for a shaped charge of claim 9 further comprising a lubricant intermixed with said tungsten and said powdered metal binder.

11. The liner for a shaped charge of claim 10, wherein said lubricant comprises powdered graphite.

12. The liner for a shaped charge of claim 10, wherein said lubricant comprises oil.

13. The liner for a shaped charge of claim 9 wherein said powdered heavy metal is tungsten.

14. The liner for a shaped charge of claim 9 wherein said powdered metal binder is copper.

15. The shaped charge of claim 9 further comprising a booster explosive disposed in said housing and in contact with said quantity of explosive, said booster explosive for transferring a detonating signal from a detonating cord in contact with the exterior of said housing to said high explosive.

16. The liner for a shaped charge of claim 9, wherein said liner body shape is selected from the group consisting of conical, bi-conical, tulip, hemispherical, circumferential, linear, and trumpet.

17. The shaped charge of claim 9 wherein said quantity of explosive comprises RDX.

18. The shaped charge of claim 9 wherein said quantity of explosive comprises HMX.

19. The shaped charge of claim 9 wherein said quantity of explosive comprises HNS.

20. The shaped charge of claim 9 wherein said quantity of explosive comprises HNIW.

21. A shaped charge of claim 9 wherein said quantity of explosive comprises TNAZ.

22. The shaped charge of claim 9 wherein said quantity of explosive comprises PYX.

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